

# **Nanoparticles induced developmental properties, safety use of pesticides and risk assessment**

Mamdouh I Nassar

*Cairo University, Egypt*

## **Abstract**

Recent growth in nanomaterials application in different science fields needs to understand the advancement of the base for engineering and create unique properties targeted towards specific applications. Historically, various fields such as biology, medicine, environmental science, and agriculture have employed the successful and safe use of nanomaterials. However, use in agriculture, especially for pest control and plant protection with nanoparticle materials is an under-explored area in the research community. Preliminary studies show that the potential of nanomaterials in improving pest control, plant protection, pathogen detection, chemical hazardous and residual effects of pesticides. This review summarizes nanomaterials application in good future agricultural assessment; helps to develop safety methods for pesticides through very careful regulation with minimal impact on human health and the environment. Well-maintained equipment with precautions that are required of pesticide application that could minimize human health exposure to pesticides and their adverse effects on the environment are also discussed.

## **Biography**

Mamdouh I Nassar has completed his Bachelor's degree from Biology Department, Faculty of Science, Cairo University; MSc degree at the same University and PhD degree in Channel System at University of Maryland College Park (USA) and Cairo University. He did many studies in the field of sleeping sickness and Malaria diseases of vectors *Stomoxys calcitrans* and *Anopheles* in USDA Florida, Jazan and Jeda. He is the Staff Member at University of Maryland College Park, USA. He is a Professor of Biological Sciences at Cairo University, King Abd-Alziz, Univ. Jazan, and King Khalid Universities. He has worked as laboratory staff, for dietary Microbiology at Environmental system service, Beltsville, USA. He also was a Consultant Advisor at Home Care Company and Al-Nasr Chemicals Company.

[mmnassar2002@yahoo.com](mailto:mmnassar2002@yahoo.com)